

# LT120391

## Accessories • Fiber optics for color sensors - Diffuse reflection sensors

Diffuse reflection sensor, 1.2m, head: aluminum 30long Ø10 line, axial light exit, fiber optics: glass fiber+silicone, end piece: M18x1 plastic, -40-180°C



Photoconductors in conjunction with the appropriate fiber optics amplifier are contactless and wear-free position switches that can also be used in harsh environmental conditions. They detect objects regardless of their properties (e.g. shape, color, surface structure, material). As the photoconductive ends or heads have small dimensions and the fiber optics are also flexible, object detection in hard-to-reach places can be solved very elegantly. Fiber optics can be used without special precautions in potentially explosive areas and in zones with electrical and/or magnetic fields (high-voltage systems, electrical welding equipment), as their function is not impaired by this. Fiber optics are available in versions to implement the function as a through-beam light barrier or diffuse reflection sensor.

### Electrical features

Bending angle of the sensing head	0 °
Sensing head length	30 mm
ardTEEL_Schutzfunktionen	Verpolungsschutz   Kurzschlusschutz

### Mechanical features

Type of fiber	Multi
Design	Cylinder plain
Light exit width	6
Sensing head diameter 1	10
End piece diameter	22 mm
Fiber optic cable diameter	7.5
Sensing head diameter	10 mm
Number of fibers	1
End piece thread pitch	1 mm
Length	1200 mm
End piece length	35 mm
Sheathing material	Silicone
End piece material	Plastic
Fiber optics core material	Glass
Sensing head material	Aluminum
Light exit height	1
Design of the fiber optic connection	screw fitting M18
Thread dimension of the end piece	M18
Ambient temperature	-40 - 180 °C
ardTEME_Umgebungsbestaendigkeiten	starke Erschütterungen/Bewegungen

**Optical features**

Light exit	axial
Light beam form	Line

**Other features**

Suitable for ardTE00_Anwendungen	Color sensors with white light source / fiber optics Stanzwerkzeuge   starke Verschmutzung
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**Classification**

ETIM 8	EC002651 Fiber optic sensor/amplifier
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**More**

IPF Product Group	154 glass fibers (color recognition)
packaging dimensions	123 x 77 x 25 mm
gross weight	120 g
Customs tariff number	90011090
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes

**Extract accessories program**

**AY000004**



accessories sensor, Ø10mm,  
Plastic, For sensor 10mm, for Wall  
mounting, Screw mounting

**AY000020**



accessories sensor, Ø10mm,  
Aluminum, For sensor 10mm, for  
Wall mounting, Screw mounting

**OF500180**



sensor optical, color,  
36x50x50mm, White light, True  
color, Sn: 1-500, 22-26V DC, 2x  
PNP/NPN Push-pull, Connector M8  
4pin, IP64, Aluminum Anodised,  
With fiber optics connection, ΔE  
>= 0.5, 60kHz, 3 colors

**OF650080**



sensor optical, color,  
36x65x65mm, White light, True  
color, Sn: 1-500, 22-26V DC, 2x  
PNP/NPN Push-pull, Connector M9  
8pin, IP64, Aluminum Anodised,  
With fiber optics connection, ΔE  
>= 0.5, 60kHz, 3 colors

**AL000057**



accessories fiber optic, Lens, zoom  
lens, diffuse-reflection sensor,  
color detection, M12x1 60long, für  
Diffuse reflection sensor, External  
thread, Sn: 8-20, Aluminum+Glass

**AL000058**



accessories fiber optic, Lens, zoom  
lens, diffuse-reflection sensor,  
color detection, M18x1 51long, für  
Diffuse reflection sensor, External  
thread, Sn: 20-60,  
Aluminum+Glass

You can find further accessories on our homepage



**Installation**

Mounting / installation may only be carried  
out by a qualified electrician!



**Disposal**

WEEE number according to § 6 para. 3  
ElektroG: 40951076

**Safety warnings**

/ Before initial operation, please make sure to follow all safety instructions that may be provided in the product information.

/ Never use these devices in applications where the safety of a person depends on their functionality.